

NOTE If space is insufficient for any of the responses on this questionnaire, please use the back of the sheet or an attachment.

Section A: General

Date: _____

2. Applicant

Municipality HAMLET of AKLAVIK Telephone (867) 978-2351
 Postal Address P.O. Box 88 Facsimile (867) 978-2434
AKLAVIK, NWT
XOE OAO

3. Contacts

Municipal Contact NELLIE GRUBEN Alternate Contact ROXANNE JOHN
 Position S.A.O. Position A.S.A.O.
 Telephone 978-2351 Telephone 867-978-2351
 Facsimile 978-2434 Facsimile 867-978-2434

4. Community Status

- City
- Village
- Town
- Hamlet
- Settlement Corporation

5. Population (according to most recent census results)

1996 CANADA CENSUS 727
HAMLET ESTIMATE 1998 = 925 +/-

6. Indicate the status of the municipalities licence on the date of application.

New Application Renewal → Water Licence # N3L4-0570
Expires April 30/1999

7. Has any baseline data collection and evaluation been undertaken with respect to the physical, biological, and chemical characteristics of the main water bodies in the area?

- Yes
- No
- Unknown

If yes, please attach a summary of program details or cite titles, authors, cities, and dates.

Prepared by	Title	Completion Date
DIANO	Ongoing	

If no, are such studies being planned?

- Yes
- No

If yes, briefly describe the proposals. _____

8. Has any baseline data collection and evaluation been undertaken with respect to the various biophysical component of the environment potentially affected by the project (eg: wildlife, soils, air quality), in addition to water related information requested in this questionnaire.

Yes No Unknown

If yes, please attach copies of reports or cite titles, authors and dates.

Prepared by	Title	Completion Date

If no, are such studies being planned? Yes No

If yes, briefly describe the proposals. _____

9. Attach detailed maps which show the relative locations of the:

- (a) raw water intake,
- (b) water treatment facilities,
- (c) fuel & chemical storage,
- (d) sewage treatment facilities,
- (e) wastewater treatment area and discharge outlets,
- (f) solid waste disposal areas and drainage patterns,
- (g) hazardous waste disposal area,
- (h) transportation access routes,

- (i) existing waterbodies/courses and any changes to these water bodies/courses which have or may occur as a result of water use of waste disposal facilities, locations of environmental monitoring sites.

10. Attach detailed scale plan drawing(s) of the proposed (or present) sewage treatment system. The drawing(s) must be stamped by an engineer registered in NWT and include the following:

- (a) details of pond size and elevation;
- (b) precise details of all retaining structures (dimensions, materials of construction, etc.);
- (c) details of the drainage basin, and existing and proposed drainage modifications;
- (d) details of all decant, siphon mechanisms etc, including sewage treatment facilities;
- (e) details regarding direction and route followed by wastewater flow from the area;
- (f) indications of the distance to nearby major watercourses, and fish bearing waters;
- (g) location and construction of liners;
- (h) leachate and groundwater collection systems; and
- (i) control structures.

11. Attach detailed scale plan drawings of the proposed (or present) solid waste disposal area. The drawings must include the following:

- (a) precise details of all retaining structures (dimensions, materials of construction, etc.);
- (b) details of the drainage basin, and existing and proposed drainage modifications;
- (c) details regarding direction and route followed by wastewater flow from the area;
- (d) indications of the distance to nearby major watercourses, and fish bearing waters;
- (e) all sources of seepage presently encountered in the vicinity of these areas;
- (f) the volume of each seepage flow (m^3/day); and
- (g) the direction of each flow.

12. Attach the present or proposed contingency plan which will be used for each portion of the waste control system in the event it fails to operate properly.

13. Attach the present or proposed spill contingency plan which will be employed in case a spill of hazardous materials occurs. Describe course of action, mitigative methods and equipment available for use.

NOTE: Individual detailed large scale drawings of all facilities (dams, decant system, ditch, dike, water treatment plant, etc) constructed or proposed must be attached. Specific details with regard to the methods of construction materials used, etc. are required.

Section B: Water Supply

1. Volume of Water Use

System of Distribution	Estimated Number of People on each System	Estimated average Water Use (L/c/d)	Total Water Use (L/d)
Piped	0		
Trucked (1998)	925	108.1	100,025
Other			
Other			

(L/d) TOTAL: 100,025

$WaterUsage(L/d) * \frac{1m^3}{1000L} = WaterUsage \underline{100.0} (m^3/d)$

$WaterUsage(m^3/D) * 365days = WaterUsage \underline{36,509} (m^3/year) \quad 1998 \text{ HAMLET RECORD}$

2. Type of source Lake River Well Other _____

3. Name of raw water source and alternative, if any.
 Primary Source PEARL CHANNEL Alternative Source _____

4. Usual break-up & freeze-up months.
 Break Up MAY freeze Up OCTOBER

5. Please provide short descriptions for the following.
 - freshwater intake facility TWO (2) 250mm HIGH DENSITY POLYETHYLENE INTAKES, ONE 30m FROM SHORE, ONE 40m FROM SHORE. INTAKE SCREENS IN 4m. OF WATER
 - operating capacity of the pumps used 152 L/MIN

- intake screen size (1) 12mm OPENING, 200mm LONG, 100mm Ø
(2) 12mm OPENING, FLAT, 250mm Ø

6. Type of water storage facility. (check where applicable).

Reservoir Storage tank None Other _____ description

7. What is the capacity of the water storage facility.

190 m³

- ALSO ALTERNATE UNINSULATED TANK, ~~190~~ 190 m³

8. What is the rate of withdrawal from the source?

100 (m³/d)

9. Is water drawn from the source intermitter

continuous

If it is drawn intermittently, during what month(s) is it drawn? _____

For what time period is it drawn (days/weeks/months)? _____

10. What is the rate of flow of source (if river) or size (if lake)? _____

11. At the intended rate of water usage, describe the effects on the river or lake from which water will be drawn?

MINIMAL

12. General conditions of:

(a) Water supply facility Satisfactory Unsatisfactory

If unsatisfactory, explain _____

(b) Storage facility Satisfactory Unsatisfactory

If unsatisfactory, explain. MAIN TANK IS LEAKING, CONDITION
CURRENTLY UNDER INVESTIGATION. Plan
By GNWT to install new tank summer 1999.

(c) Distribution system Satisfactory Unsatisfactory

If unsatisfactory, explain. _____

13. Are there any changes planned in the water supply system?

No Yes

If yes, please attach a copy of the plan, or describe changes.

STUDY UNDERWAY TO DETERMINE USEFUL
REMAINING LIFE IN SYSTEM. New Storage tank
Summer 1999. System upgrade: Design 2000/01, Construction
2001/02

Section C: Water Treatment

1. Indicate the quality of the raw water prior to treatment & distribution.

Good

Fair

Poor

Describe.

HIGH TURBIDITY DURING BREAKUP & OVER
SUMMER MONTHS

2. Indicate the capacity of the treatment facility.

189 L/min

3. Type of water treatment facility.

Filtration & Chlorination

Other _____ description

Chlorination only

None

COAGULATION, FLOCCULATION, SEDIMENTATION
FILTRATION, CHLORINATION

4. Describe in detail the method of water treatment (i.e. backwash, flocculation, sedimentation, chemicals used), and provide the results of the most recent bacteriological and chemical analysis. Attach a diagram if possible

PLANT HAS A FLOCCULATOR/TUBE CLARIFIER FOLLOWED
BY A WATERLOU WB-82 (COAGULATION, FLOCCULATION,
SEDIMENTATION : FILTRATION).

CHEMICALS USED ALUM & POLYMER

BACKWASH FROM BOTH UNITS RETURNED TO RIVER.

5. Have there been any problems or health and environmental concerns with the water treatment facilities?

No

Yes, describe

6. Are there any changes planned in the water treatment facilities?

No Yes

If yes, please attach a copy of the plan or indicate changes.

Section D: Sewage Disposal

1. Indicate the level of treatment the sewage will be receiving:

primary secondary tertiary

Pre-treatment (if applicable): screening maceration

Lagoons (if applicable): anaerobic aerobic facultative

2. Indicate the capacity of the sewage treatment facility _____
m3

3. Indicate the retention time of the sewage while in the treatment facility _____
days

4. Indicate the estimated rate of discharge of wastewater _____ L/sec

5. Indicate the location of the discharge point, Peel River

6. Will the discharge be:

- seasonal
- continuous

If the discharge is seasonal, during what month(s) is it done? Summer Spring Breakup

What is the duration of the discharge (days/weeks/months)? 1 month

7. Comment on the general condition of the:

- (a) Sewage collection system Satisfactory
- (b) Discharge control system N/A
- (c) Dams, diversion dykes, N/A

8. Have there been any problems or health and environmental concerns with the sewage disposal facilities?

- No
- Yes, describe. Some community members concerned that sewage contaminates river.

9. The average depth of the wastewater lagoon is 1 m.

10. What is the design freeboard? N/A m.

11. Is there any harvesting of fish or shell fish in the waters where waste is discharged?

- NO

No

Yes

If yes, please indicate species harvested, and estimate amounts.

12. Will the municipality be using a honey bag pit?

Yes

No

If yes, describe its:

Location per design.

Drainage _____

Operation & Maintenance per O&M manual.

13. Are there any sources of commercial or industrial liquid waste being discharged or deposited to the municipal system which may affect the quality of the effluent or leachate produced?

Yes

No

If yes, please describe.

14. Have any spills occurred in the past five years?

Yes No

If yes, describe.

15. Has there been any operating problems with the lagoon?

Yes No

If yes, describe.

16. Are any changes planned in the sewage disposal facilities?

Yes No

If yes, please describe and if possible, attach a copy of the plan.

Section E: Solid Waste Disposal

- 1. Indicate the capacity of the disposal area, per previous application m³
- 2. The average depth of the solid waste disposal site is per previous application m.
- 3. Are there any sources of commercial or industrial solid waste being deposited in the municipal system which may affect the quality of the effluent or leachate produced?
 Yes No

If yes, please describe. _____

4. Briefly describe how the solid waste will be picked up & delivered to the disposal area.

-Garbage truck = per O&M manual.

5. Is the solid waste site fenced?

Yes No

6. Will the municipality be using a dead animal pit?

Yes No

If yes, describe its:

Location- _____

Drainage- _____

Operation & Maintenance- _____

7. Will the municipality be using a hazardous waste disposal area? If yes, describe its: No

Location- _____

Structure- _____

Operation & Maintenance - _____

8. Are there any hazardous commercial wastes entering the solid waste disposal system?

Yes No

If yes, describe and note amounts and special handling/disposal methods for these wastes.

9. If any natural watercourse may gain access to the proposed solid waste disposal area, what methods will be used to decrease the amount of runoff water entering these areas? Indicate the volume of water which may enter these areas from the source(s) in question and attach all pertinent details of proposed diversions.

Source	Volume (m3/day)

10. Please describe the nature of any diversions of watercourses:

11. Have there been any problems or health and environmental concerns with the solid waste disposal facilities?

No Yes

describe.

12. Are any changes planned in the solid waste disposal system?

Yes No

If yes, please describe and, if possible, attach a copy of the plan.

Section F: Abandonment and Restoration Program

1. List and describe the locations of abandoned or restored water treatment facilities.

N/A

2. List and describe the locations of abandoned or restored sewage treatment facilities.

N/A

3. List and describe the locations of abandoned or restored solid waste disposal facilities.

N/A

4. Do you have an abandonment and restoration plan?

Yes No

If yes, please attach a copy of the plan.

Section G: Water Quality and Monitoring Program

1. Briefly describe the methodology that is presently used to sample.

per ^DEM manual, original license

2. Recognized laboratory performing analysis of samples.

name Taiga Labs

contact name _____

postal address YK

postal address _____

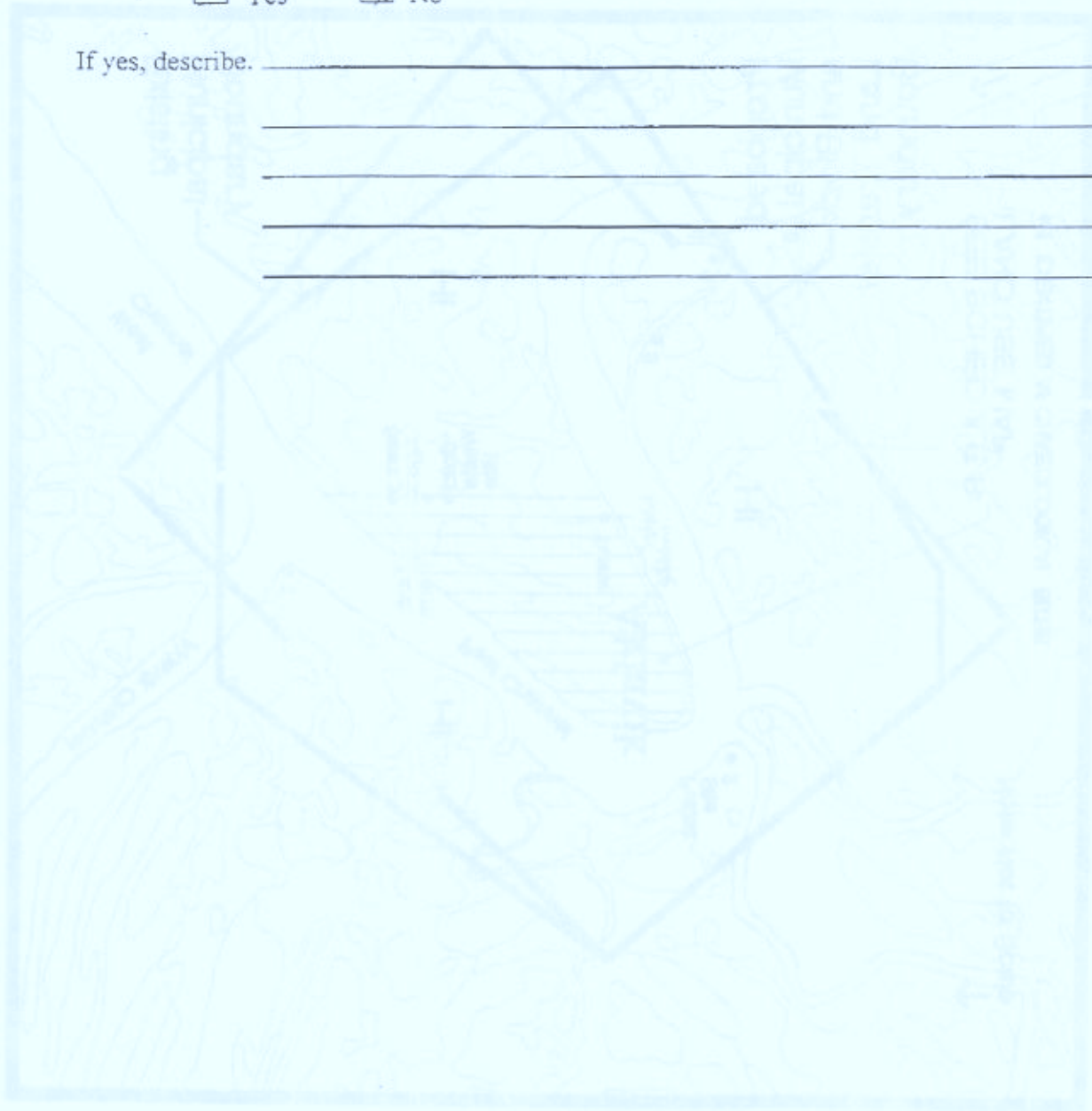
telephone number _____

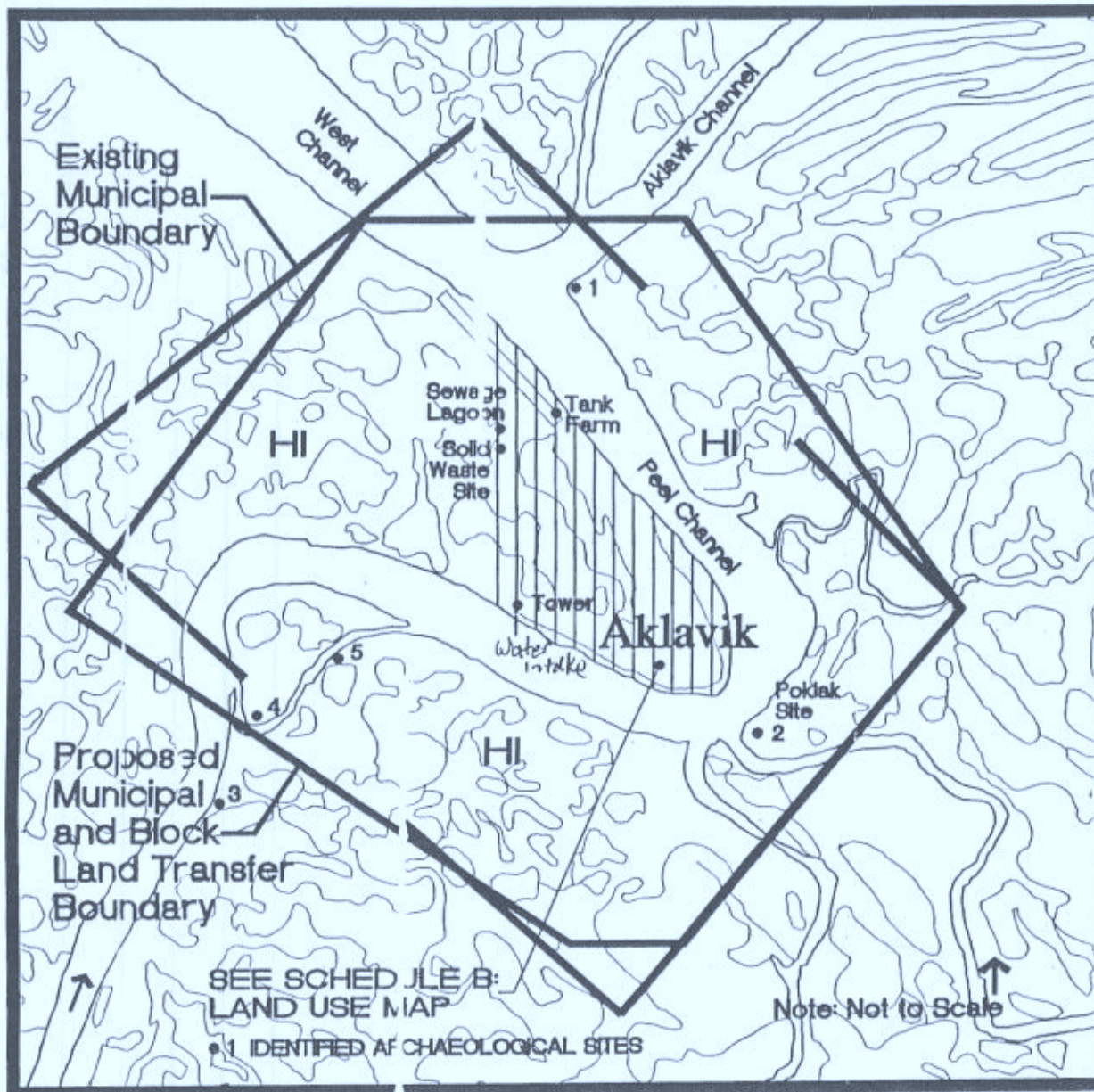
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3. Are any changes planned in the water quality monitoring program?

Yes No

If yes, describe. _____





HAMLET BOUNDARY MAP

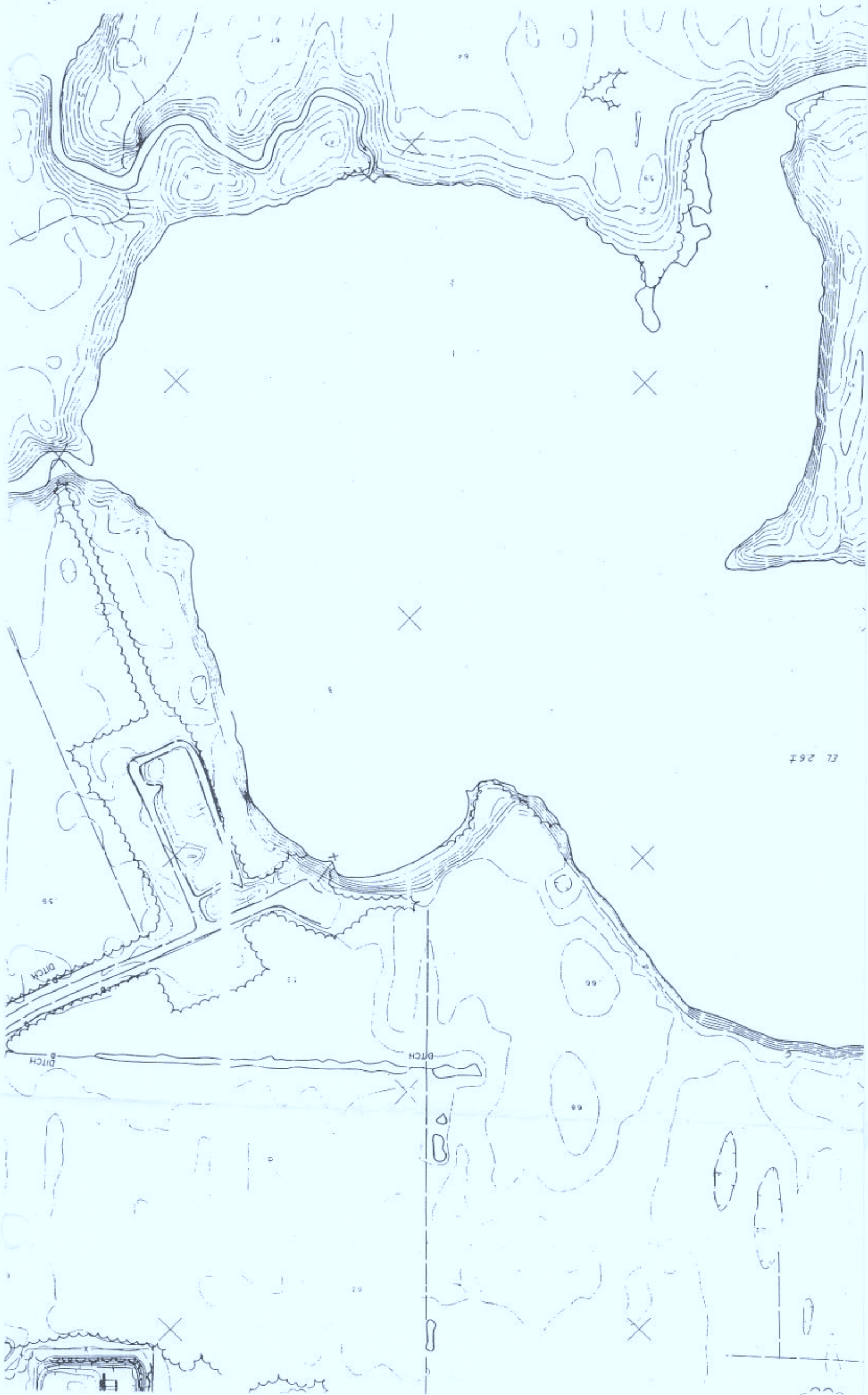
1.0 GENERAL POLICIES

It is the intention of Council within the municipal boundaries in accordance with the following:

- a) All development projects require review, recommendation and approval before construction.
- b) Council will direct development in an orderly and efficient manner.
- c) Council may approve this plan, if in the best interest of the community.
- d) Council will encourage development which it deems appropriate in buffer areas through zoning.
- e) Prior to construction, all approvals and permits must be obtained from the appropriate public agency or Agency of the Government of Canada.
- f) Aklavik has been designated as a Federal Heritage Site by the Government of Canada - NWT. Council is aware of the importance of the site in accordance with the Heritage Act.
- g) Council will encourage development that minimizes shoreline erosion and protects the shoreline.
- h) Council will maintain the integrity of major lakes and streams by reducing erosion and protecting the shoreline.
- i) All developers and contractors must provide road access and driveway services.
- j) Developers and contractors must provide for the transplanting of trees and shrubs where appropriate.
- k) In the interest of the community, vacant and condemned buildings must be removed as soon as possible.
- l) Council will ensure that all development is in accordance with the municipal boundaries.
- m) Council will encourage development within the municipal boundaries.

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